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CLAIMS

1. A locating and map downloading system comprising:

a personal digital communicator comprising:

a display;

a receiver for receiving GPS signals;

a first transceiver;

a first modem coupled to the transceiver and to a first digital processor;

communicator input means for formatting a request for map information;

the first digital processor providing a means for processing the GPS signals and determining therefrom the location of the communicator, for transmitting via the first modem and the first transceiver the request for map information, for displaying on the display map information responsive to the request, and for displaying on the display the communicator location with reference to the map information; and

a map storage and transmitting device comprising a second transceiver, a second modem coupled to the second transceiver and a second digital processor, memory for storing map information in digital form, the second digital processor providing a means for determining which map information stored in the memory is responsive to the request and transmitting via the second modem and the second transceiver the map information responsive to the request.

2. The locating and map downloading system of claim 1 wherein the first processor transmits via the first modem and the first transceiver a request for map information pertaining to the communicator location and receives via the first transceiver and the first modem map information responsive to the request.

3. The locating and map downloading system of claim 1 wherein the first processor transmits via the first modem and the first transceiver a request for map information pertaining to a location other than the communicator location.

4. The locating and map downloading system of claim 1 wherein the map storage and transmittal device memory stores additionally stored data associated with discrete data points within the map information and such additionally stored data is transmitted with the responsive map information.

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5. The locating and map downloading system of claim 4 wherein the communicator receives via the first transceiver and the first modem the additionally stored data.

6. The locating and map downloading system of claim 5 wherein the communicator further comprises communicator memory for storing map information and additionally stored data in digital form and the first processor stores in communicator memory the device location.

7. The locating and map downloading system of claim 6 wherein the map storage and transmitting device comprises a second personal digital communicator.

8. The locating and map downloading system of claim 7 wherein the first processor transmits via the first modem and the first transceiver a request for the location of the second communicator.

9. The locating and map downloading system of claim 4 wherein the first processor requests map information and additionally stored data using selection criteria.

10. The locating and map downloading system of claim 4 wherein the first processor transmits further data associated with a location to the map storage and transmittal device and the second processor stores the further data associated with the location in the map storage and transmittal device memory.

11. The locating and map downloading system of claim 8 wherein the second communicator transmits the location of the second communicator in response to the request for the location of the second communicator.

12. The locating and map downloading system of claim 1 wherein the first processor determines a heading of direction of the communicator.

13. The locating and map downloading system of claim 9 wherein the map storage and transmittal device memory stores additionally stored data associated with discrete data points within the map information and a marker indicating the availability of such additionally stored data is transmitted with the responsive map information.

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14. The locating and map downloading system of claim 9 wherein the first processor displays on the displayed map information a marker at a position on the display corresponding to a discrete data point, the marker indicating that additionally stored data is available for the discrete data point.

15. The locating and map downloading system of claim 14 wherein the first processor displays on the displayed map information different markers based on aspects of the additionally stored data.

16. The locating and map downloading system of claim 14 wherein the communicator input means provides for selection of the marker.

17. The locating and map downloading system of claim 16 wherein the first processor determines a route to a selected marker.

18. The locating and map downloading system of claim 17 wherein the first processor determines a route to a number of sequentially selected markers.

19. The locating and map downloading system of claim 18 wherein the first processor modifies the route to a number of sequentially selected markers in response to the selection of a further marker.

20. The locating and map downloading system of claim 16 wherein the first processor displays on the display additionally stored data associated with a discrete data point when the marker associated with the discrete data point is selected.

21. The locating and map downloading system of claim 16 wherein the first processor transmits via the modem and the transceiver a request for additionally stored data when the marker associated with the discrete data point is selected.

22. The locating and map downloading system of claim 21 wherein the additionally stored data comprises a video data file.

23. The locating and map downloading system of claim 21 wherein the additionally stored data comprises an audio data file.

24. The locating and map downloading system of claim 6 further comprising a weather information gathering device providing weather information to the first processor.

25. The locating and map downloading system of claim 24 wherein the first processor automatically transmits via the first modem and first transceiver the weather information.

26. The locating and map downloading system of claim 1 wherein the first processor determines the direction of North.

27. The locating and map downloading system of claim 9 wherein the first processor determines if the communicator memory contains map information for a geographic area within a selected radius of the communicator and transmits via the modem and the transceiver a request for map information for a geographic area within a selected radius of the communicator if the communicator memory does not contain such map information.

28. The locating and map downloading system of claim 1 wherein the first and second transceivers are transceivers for communicating in a cellular phone network.

29. The locating and map downloading system of claim 1 wherein the first and second transceivers are transceivers for radio communications.

30. The locating and map downloading system of claim 1 wherein the first and second transceivers are transceivers for telephonic communications.

31. The locating and map downloading system of claim 1 wherein the first and second transceivers are transceivers for communicating in a satellite communications network.

32. The locating and map downloading system of claim 1 wherein the first processor stores communicator configuration information in the communicator memory and configures the communicator according to the configuration information.

33. The locating and map downloading system of claim 32 wherein the communicator configuration information includes at least one personal identification number and the processor configures the communicator differently in response to different personal identification numbers.

34. A personal digital communicator device comprising:

a GPS receiver for receiving GPS signals;

a processor to determine the device location based on the GPS signals;

communication means to provide the device location to other personal digital communicator devices, to receive the device locations of the other personal digital communicators, and to request and receive map information from digital map storage devices; and

a display to display external map information received from digital map storage devices, and the device location and the other device locations on the external map information display.

35. The personal digital communicator device of claim 34 wherein the processor formats requests for specified data regarding unspecified locations within a geographic area from a data provider and processes responsive data to the requests received by the communications means, the responsive data including geographic location data.

36. The personal digital communicator device of claim 35 wherein the display displays a symbol indicative of the geographic location of the responsive data on the external map information display.

~~37~~ 33. The personal digital communicator device of claim ~~36~~ 32 further comprising computer memory accessible by the processor.

~~38~~ 34. The personal digital communicator device of claim ~~37~~ 33 wherein the computer memory stores internal map information in the computer memory.

39. The personal digital communicator device of claim 38 wherein the display displays the internal map information in the computer memory and a symbol indicative of the geographical location of the responsive data on the internal map information display.

40. The personal digital communicator device of claim 39 further comprising a keyboard input means for providing data to the processor.

41. The personal digital communicator device of claim 40 wherein the indicative symbol is selectable using the keyboard input means and the display displays the responsive data when the indicative symbol is selected.

42. The personal digital communicator device of claim 40 wherein the indicative symbol is selectable using the keyboard input means and the processor formats a request for data regarding the geographical location indicated by the indicative symbol when the indicative symbol is requested.

43. The personal digital communicator device of claim 34 wherein the processor determines a heading of direction of the device.

44. The personal digital communicator device of claim 34 wherein the processor determines the direction of north.

45. The personal digital communicator device of claim 34 further comprising a weather information gathering device providing weather information to the processor.

46. The personal digital communicator device of claim 40 wherein an entered personal identification number is entered using the keyboard means, at least one stored personal identification number is stored in the computer memory, the processor compares the entered personal identification number and the at least one stored personal identification number and disables device operation for a period of time if the compared personal identification numbers are not identical.

47. The personal digital communicator device of claim 46 wherein a plurality of personal identification numbers are stored in the computer memory and the displayed map information is displayed in different predefined formats when different personal identification numbers are entered.

48. A location tagged information storage and transceiver system comprising:

a transceiver means for receiving and transmitting digital data from and to an external computer;

a computer processor;

computer memory for storing map data for geographic areas and non-map data, with the non-map data in linked data fields concerning specific locations within the geographic areas for which map data is available tagged to the map data;

a sorting application module executed by the processor responsive to requests for specified non-map data concerning specified geographic areas, the sorting application module searching the computer memory by data fields for the specified non-map data and providing the specified non-map data and non-map data linked to the specified non-map data to the transceiver means; and

the transceiver means transmits the specified non-map data and the data linked to the specified non-map data.

49. The location tagged information storage and transceiver system of claim 48 wherein the sorting application module searches the computer memory for map data for the specified geographic area and provides map data for the specified geographic area to the transceiver means and the transceiver means transmits the map data for the specified geographic area.

50. The location tagged information storage and transceiver system of claim 48 further comprising a linking and tagging module executed by the processor for linking data pertaining to a specific geographic location in linked data fields and tagging the linked data fields with a marker indicative of geographic location.